RESEARCH PAPER

# Evolution and Diversification of Community Forestry Regimes in Babati District, Tanzania

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**Abstract** Since the 1980s many tropical countries have promoted community forestry (CF). Gradually, various forms of community forest management regimes were developed in response to decentralization processes in the forest administration or the government administration. The emergence of community forestry regime (CFR) complexes and their evolutionary pathways have still been little explored. In Tanzania, Babati District is a pioneer in the development of CF. This paper assesses how emergence of a CFR complex is related to dynamic institutional interactions at local community level and bureaucratic level. It is demonstrated that evolution and diversity of CF regimes is associated with (a) a partial bureaucratic deconcentration of the government's administrative authority over forests from national level to district level, and (b) democratic decentralization in the form of a partial devolution of formal management authority over forests from governmental authorities to local communities and individual people. Also, it is shown that endogenous changes in the norms and principles of the traditional systems of indigenous forest management occurred, calling for formulation of policy objectives that help to sustain local management practices.

**Keywords** Decentralized forest management · Community-based forest management · Joint forest management · Institutional dynamics

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## Introduction

In 1976, Food and Agriculture Organization (FAO) of the United Nations commenced a program on Forestry for Local Community Development, in which community forestry (CF) was characterized as 'any situation which closely involves local people in a forestry activity either through activities by individual households or those involving a community as a whole' (FAO 1978). However, gradually attention has shifted to the option of a joint or collaborative management (Wily 2000; Havnevik 2006). The new policies reflected a substantial change in the traditional approach of government-led control over forests (Agrawal et al. 2008). Since the 1980s, much attention has been given towards decentralization policies in forest governance (Agrawal and Ribot 1999; Larson and Soto 2008). There are two important reasons for this change in governing forests. Firstly, in many tropical countries the historically developed centralized forest management regimes (FMRs) have resulted into open access of state forests (Wily and Mbaya 2001; Petersen and Sandhöven 2001). Secondly, it became recognized that forest management (FM) should involve the local people who are dependent upon forests for their livelihoods (Arnold 2001).

The decentralization process resulted in the evolution of various types of CF. Originally, the main perspective of CF was that it involved an autonomous local organization with its own decision-making and control abilities. This perspective is reflected in much of the initial research on CF. Such research focused on assessing the nature and development scope of local norms and indigenous practices for using and controlling forest resources (Berkes et al. 2000; Lawrence 2000) and the nature of community-level organization for managing common property forest resources (Gibson et al. 2000). Gradually, it became evident that the effectiveness of CF does not only depend on local factors, but also on external factors (Agrawal 2001). Consequently, the perspective of CF evolved into local forestry organizations becoming embedded in global and national institutional frameworks for forest-related decision-making and control (Wiersum et al. 2012).

The variety of approaches to CF is reflected in various terms referring to CF, including participatory forest management (PFM), community-based forest management (CBFM), joint forest management (JFM), and CF user groups (Bhattacharya and Basnyat 2005). At a generic level, two main types of CF can be distinguished, namely CBFM where a community is both the owner and manager of forest, and JFM where communities manage government-owned forests jointly with a government agency (Wiersum 2004). These two models of CF co-exist in many countries. For instance in Tanzania, both CBFM projects in local forests under the responsibility of local communities and JFM projects involving community participation in the management of government forests are officially recognized (Blomley and Ramadhani 2006).

Most institutional assessments of CF focus on the characteristics of specific models with respect to either the local organisation for using and managing the forest resources (Gibson et al. 2000) or the decentralisation processes of government administration (Larson and Soto 2008). Little attention has been given towards assessing the manner in which these two types of institutional dynamics interact and

how they may result in a CFR complex. This paper presents an analysis of how the interaction between forest management at local community level and bureaucratic level have resulted into the emergence of a CF complex in Tanzania. The paper is based on a study in Babati district in Tanzania, which was one of the first districts in Tanzania where both CBFM and JFM were stimulated (Wily 2001). The paper addresses the following questions:

- What changes occurred in government administration in Tanzania and how have they influenced the institutional arrangements for community forest management?
- What local level changes in CF regimes occurred in Babati?
- What have been the main institutional pathways in the development of the CF regime complex in Babati district?

## Conceptual Approach

During the last decade, the concept of forest regime has gained prominence. Originally, the concept was used in a policy context as referring to a set of international governance arrangements for conserving, using and managing forests. According to Krasner (1982), a *regime* refers to a set of implicit or explicit principles, norms, rules and decision-making procedures around which actor's expectations converge in a given area. In the 1990s, much attention focused on the hypothesized emergence of a global forest regime (Humphreys 1999). But with the increase of international policies stimulating conservation and sustainable use of forests, the notion has changed towards the emergence of an international regime complex consisting of specialized regimes that are more or less linked together, sometimes mutually reinforcing each other, but at other times overlapping and conflicting (Rayner et al. 2010).

Various authors have also used the term regime in relation to FM (McCarthy 2000; Taylor 2000; Kant and Berry 2001; Kumar 2002). In some cases, it is used in reference to the set of silvicultural norms and principles for managing forests, but in other cases it is used to refer to the norms, principles and rules for organising forest management (Kant and Berry 2001). Following this last interpretation, a CF regime is defined in this paper as a specific institutional-organizational framework for forest management, characterized by a specific set of rules, norms, and actors. In analogy to the concept of a regime complex at the level of international forest policies, a CFR complex is defined as the co-existence of various types of CFR, each characterized by its own specific institutional-organizational features.

*Institutions* are often defined as a set of rules and norms that shape interaction among human and nature (Agrawal and Gibson 1999) while *organizations* are normally defined as entities organized for addressing some interests or meeting a set of goals of some groups (Murphree 1994). Institutions define and give an organization a meaning (North 1990). Hence, institutions form the basic structuring elements of a CFR with respect to norms and rules. Institutions can be either socially embedded or bureaucratic (Cleaver 2002; De Koning 2011). In the first case, the norms and rules are based on local culture and everyday social interaction.

In the second case they are based on formalized arrangements, contracts and legal rights. Regarding FM, the socially embedded norms and rules are reflected in the traditional indigenous management systems (Wiersum 1997; Berkes et al. 2000), whereas the bureaucratic norms and rules are introduced by government or development agencies (De Koning 2011). At the interface of these two normative systems, FMRs may change over time. This change does not only involve a change in institutions, but also a change of actors and organizations (Wily and Mbaya 2001; Kumar 2002; Thanh and Sikor 2006). Two main drivers of institutional change impacting on CF may be distinguished: a change in the formal forest administration in the form of bureaucratic change and endogenous changes at a community level.

## Bureaucratic Changes

The development of CF is often related to *decentralization*. This process is defined as any act in which a central government formally cedes powers to actors and institutions at lower levels in a political-administrative and territorial hierarchy (Agrawal and Ribot 1999). The process is multi-dimensional and includes various kinds of institutional changes (Mayers and Bass 1999; Ribot et al. 2006):

- A process of deconcentration (or administrative decentralization) of government policy from central to lower levels of government bureaucracy;
- A process of delegation of authority from a government service to a semi-public organisations or to civil society groups such as non-governmental organizations;
- A process of privatization from the public to the private sector, non-state actors such as commercial organizations;
- A process of devolution of forest management authority from state authority to local public groups such as communities;

Some scholars, who emphasize political decentralisation, do not consider delegation and privatisation as part of decentralization, because these processes do not lead to downward ceding of power to local communities, but rather to a transfer of power to actors who may not be accountable to communities (Agrawal and Ribot 1999; Ribot et al. 2006).

Two main types of bureaucratic decentralisation in forestry can be distinguished: (a) decentralisation of government forestry organisations, and (b) decentralisation of the government administration. In the first case, the rights and responsibilities for forest conservation and management are transferred from central level to lower administrative levels within the specialized governmental forestry services. In the second case, the rights and responsibilities are transferred from centrally-organized governmental forestry services to lower-level government administrations such as provinces and districts (Wily 2000; Nygren 2005; Barr et al. 2006; Yasmi 2007).

## Endogenous Change

As any process of rural development, changes in the community forestry regimes (CFRs) are not only influenced by exogenous bureaucratic drivers but also by

endogenous drivers (Berkes et al. 2000; Frost et al. 2007). In many regions, indigenously-developed norms and principles for forest use and conservation exist (Wiersum 1997; Berkes et al. 2000). These indigenous forestry regimes are often informal. But as they are socially-embedded they often have been effective in regulating forest resource use. However, the traditional norms underlying indigenous forest management may gradually change as a result of new normative commitments brought about by changing religion or advance of modern education (German et al. 2006) or by advancing commercialization (Agrawal 2001). These changing norms may be reflected in the gradual adaptation of the indigenous FMRs. For instance, the traditional forms of communal management may gradually be supplemented by private forms of forest resource management such as tree growing (Johansson 1991). The local management regimes may also become eroded by the advent of formal government arrangements, or they may be adapted to incorporate the externally-initiated professional norms and principles (Cleaver 2002; Ylhäisi 2003).

## The Study Area

Babati District (Fig. 1) is the first districts in Tanzania where both CBFM and JFM regimes have been stimulated by several forestry development programs (Wily and Mbaya 2001; Zahabu 2008; Kajembe et al. 2009). In addition, programs to stimulate private tree growing were carried out in this region (Johansson 1991). Due to this history, the district was selected for studying the process of institutional evolution of CFRs in Tanzania.

A multiple case study approach was adopted, in which four villages (Ayasanda, Endanachan, Haraa and Boay) were purposely selected to represent differing CFRs. In Ayasanda and Endanachan, CBFM schemes are present, and in Haraa and Boay, JFM schemes exist. In Haraa, inhabitants include Chagga immigrants and original Gorowa people, while original Gorowa people dominate in the other three villages.



**Fig. 1** Maps showing location of Babati District in Manyara Region in Tanzania

## Research Method

A combination of methods, including focus group discussions, in-depth interviews with key informants, observation and content analysis of documents were used to collect data in the years 2007 and 2008. The focus groups comprised 6–12 people. Field notes were used to record information during discussions. The researcher led open-ended discussions in Kiswahili language using a check list of general questions and follow-up questions. The researcher was assisted by a trained local research assistant, who took notes during discussions, and translated some expressions from Kiswahili into local languages and vice versa, for the speakers who were not fluent in Kiswahili and for the researcher who did not understand the local language.

In-depth interviews were conducted with key informants who could provide information on the history of CF in Babati district. The key informants were village chairpersons, members of the village environmental committee (VEC) and individuals who have in-depth understanding of the history of FM in their respective villages. Other key informants were district- and catchment foresters and Babati district technical advisers. Observations were made to determine how FM was implemented in reality. In addition, secondary data were collected from various scientific sources, and reports in the study district. Data analysis was done by abstraction of information and relating the ideas of respondents to abstract concepts (following Punch 2005).

## Results

Evolution of Forest Administration in Tanzania

Historically, four main periods in forest management and its organisation can be identified in Tanzania (Simonsson 2004; Vihemaki 2005; Sunseri 2005; Blomley and Ramadhani 2006): the period of indigenous forest management; the period of centralized state policy; the period of *Ujamaa* villagization; and the period of bureaucratic decentralization (Table 1).

*Period 1: Socially Embedded Institutions and Organizations*

Indigenous form of CF has existed in Tanzania for a long time but on small scale. Historically, several traditional organizations and socially-embedded institutions have guided the management of forest resources. These indigenous forms of FM include the silvopastoral Ng'itiri system in Shinyanga, the maintenance of ceremonial Qaimanda, Qaidasu and traditional elders' forests in Babati district, and sacred trees present in Tanzania (Maro 1974; Munyanziza and Wiersum 1999; Iddi (2002); Ylhäisi 2003; Akida and Blomley 2008).

*Period 2: Centralized State Policy*

As in many other countries, initial efforts of formulating a state forest policy and establishing a formal Forest Department (FD) took place in Tanzania in colonial times. The colonial FD had the responsibility for managing state forest reserves. The FD

**Table 1** Evolution of forest administration in Tanzania

| Period | Main characteristics |
| --- | --- |
| 1. Period before state forest policy (<1891) | Indigenous forest management |
| 2. Period of centralized state policy (1891–1974) | Demarcation of state forest reserves |
| | Stimulation of formal forest management in non-state forest reserves |
| | Private tree planting among few people started |
| | Continuation of indigenous FMRs |
| 3. Period of *Ujamaa* villagization (1975–1980s) | Promotion of communal and private farm trees planting in territories of newly established villages |
| | Initial efforts at extending CF to natural forests |
| | Due to changes in land tenure conditions gradual demise of various forms of indigenous forest management |
| 4. Period of political and bureaucratic decentralization (1990s—recent times) | Development of dual forest administration at national and district level, and gradually increased role of district forest officers (DFOs) |
| | Initiation of CBFM program |
| | Following CBFM results initiation of JFM |

evolved into the Ministry of Natural Resources and Tourism (MNRT) of the post-independency government. Historically, the FD activities were based on a centralized approach with FD officials being considered as key actors in FM. Forest management was characterised by delineation of forest resources and eviction of local people from their habitats leading to creation of forest reserves for state' commercial extraction, conservation of the resources for future government use and protection of water sources (Ylhäisi 2003; Sunseri 2005; Larson et al. 2010).

*Period 3: Ujamaa Villagization*

In the 1970s, the *Ujamaa* villagization policy had a major impact on FM. The period of *Ujamaa* villagization was characterised by relocation of local people from traditional scattered settlements to new *Ujamaa* villages (Vihemaki 2005; Ylhäisi 2003). As a result of these relocations, local people and traditional leaders who protected forests were removed from their original homesteads, and lost control over the more remote revered forest sites. Moreover, the *Ujamaa* Village Act of 1975 established village councils and abolished the traditional leadership, making the latter losing their socio-cultural authority (Semboja and Therkildsen 1994; Simonsson 2004). The FGD with group of elders revealed that the *Ujamaa* period was characterised by deforestation of natural forests as a result of the need for wood for establishing new homes and opening up of new lands for farming.

*Period 4: Political and Bureaucratic Decentralization*

With the advent of political and bureaucratic decentralisation processes in the late 20th century, CF gradually became further stimulated. Two forms of

decentralisation have greatly impacted on the development of new formal types of PFM by local communities. These are the processes of decentralization of the government administration and forest administration, respectively (Table 2).

Decentralisation of Government Administration

The development of decentralized forest management (DFM) in Tanzania was strongly related to the process of administrative and political decentralisation (Lund 2007; REPOA 2008; FAO 2010). The nature of DFM can therefore best be understood by placing it in the broader context of the administrative and political decentralized structure of the country. Through the 1982 Local Government Act, the government administration is formally organized at both national and district levels.

Through the *Forest Act*, *2002* the central government has delegated the district council authorities to manage the so-called local authority forest reserves (LAFRs). On the other hand, the MNRT has the mandate of managing central government forest reserves. The central government commissioners at district and regional levels also have the responsibility to monitor service delivery in areas of their jurisdiction which includes the monitoring of the forest management by the MNRT. As an example, key informant interview with forest officers revealed that in 2006, regional commissioner ordered the transfer of district catchment officer out of Manyara region. The transfer was given because the commissioner was dissatisfied with the officer's performance in managing catchment forests in Babati district. In the same year, district commissioners ordered the dissolution and reformulation of VEC due to perceived local process of environmental and forest degradation.

At the district level, district councils are formally responsible for managing district forests through district council's employed forest officers. The 1982 Local Government Act also gave power to village councils to propose village by-laws (Havnevik 2006) including those related to natural resource management (NRM). The by-laws should be approved by the district councils. The local authority for FM has been reiterated in the 1998 National Forest Policy which mandates district and village councils to manage forests in their jurisdictions.

**Table 2** Decentralization processes in forest administration in Tanzania

| Main types of bureaucratic evolution | Characteristics of the bureaucratic evolution |
|---|---|
| Government administration | Bureaucratic decentralisation from government administrative authority to districts |
| | Democratic decentralization of local government at district and village levels |
| Forestry administration | Differentiation between national forests and district forests |
| | Administrative deconcentration of management authority over national forests |
| | Democratic decentralization with respect to decision-making on district forests |
| | Devolution of forest management authority to local communities |

## Decentralisation of Forest Department Administration

According to key informants, in the 1980s, the forest administration of the MNRT was gradually deconcentrated to regional and district levels following the Norwegian Agency for Development Cooperation's (NORAD) advice. Central government's catchment forest offices were created at regional, district and divisional administrative levels. The catchment forest officers (CFOs) as employees of the MNRT were responsible for managing essential watershed protection forests, under the guidance of the *Forest Ordinance*, *1957*. They were recruited and posted at the three administration levels. The advice coincided with the government plan in establishing local government authorities in 1982. The advice was based on the assumption that local governments might not effectively manage the catchment forests, and therefore, should be assisted by professional central government foresters posted at local levels. Posting of forest officers to lower governments levels enabled the ministry to maintain at least partial authority for managing catchment forests.

## Diversification in Community Forestry Regimes

The decentralisation processes marked the beginning of several programs for PFM. Two specific regimes had emerged. The CBFM regime which was initiated in 1994, has concerns in the management of village forest mainly by local communities. The JFM regime, initiated in 1998, is focused on joint management of government forest reserves (Akida and Blomley 2008; Blomley and Ramadhani 2006). Both CFRs started for the first time in Babati district and were formalized in the 1998 Forest Policy and the 2002 Forest Act (Havnevik 2006), respectively.

## Evolution of Forest Management Regimes in Babati

The historical evolution of FMRs in Tanzania is reflected in Babati district (Table 3). Four location-specific phases in institutionalization and organization of forest management can be recognized as follows:

- Indigenous forest management
- State forest management: gazettal of state forest reserves started in the 1930s
- Stimulation of private tree growing starting in the 1980s
- Development of PFM schemes in the mid 1990s as a result of bureaucratic and political decentralization.

The history of forest management in Babati started with indigenous forest management. Several forests served as revered locations for ceremonial practices, such as the *Qaidasu* forests used for education and initiation rites for girls at the age of puberty, the *Qaimanda* ceremonial forests of Manda traditional group (Gorowa tribe) used for traditional ceremonies and circumcision of boys, and traditional forests reserved for ceremonies of traditional elders. Also, spring forests and sacred trees were protected.

Another traditional forest management practice concerns the maintenance of agroforest gardens. This practice involves the growing of mixture of fruit and other

**Table 3** Evolution in forest management regimes in Babati district

| Phase | Period | Main characteristics and events |
|---|---|---|
| Indigenous forest management | Traditional | Indigenous forest management by local cattle-keeping people. |
| | | Tree cultivation practices introduced by migrant Chagga farmers |
| State forest management | 1931–1941 | Gazettment of Nou, Bereku and Ufyome national forest reserves under authority of British pre-independence central government |
| | 1966–1972 | Authority of district development planning including management of national forests transferred to district council (Semboja and Therkildsen 1994) |
| | Mid 1970s | DFOs had formal responsibility of managing the common forests within the district (including forests on village and general lands) as well as government forest reserves. Haraa forest gazetted as a state forest |
| | Starting early 1980s | Establishment of catchment forests under the authority of catchment forest foresters |
| | 1982 | Formalization of local government authority. Renewed role for DFOs |
| | Early 1990s | Proposal for gazettal of Duru forests as a district forest reserve followed by survey of forest boundaries |
| Stimulation of private tree growing | 1980–early 1990s | Donor facilitated program to stimulate farm tree growing |
| Development of PFM | 1994 | Introduction of CBFM to Duru-Haitemba village forest reserves which include village forests at Ayasanda and Endanachan villages |
| | 2002 | Start of JFM in Bereku forest reserve including the area adjacent to Haraa and Boay |

useful trees, coffee and banana. It is believed to have been developed 500 years ago or more in the 16th century or earlier by the Chagga people living on the slopes of Mount Kilimanjaro (Maro 1974). Even before Tanzania's independence in 1955, Chagga immigrants from the Kilimanjaro region had moved to Babati, where they introduced their indigenous tree cultivation practices in their new settlements. Although the traditional Gorowa ethnic people in Babati were not tree planters, some also started to cultivate coffee and grow Grevillea as an auxiliary tree.

A new era of centralized forest management in Babati started in the 1930s, when the pre-independency government created the first formal forest reserves as a means for water catchment protection (Simonsson 2004; Sunseri 2005). The centralized forest management in Babati resulted into gazettment of three national reserves, namely, Bereku in 1932, Nou in 1933, and Ufyome in 1941. This centralized forestry regime gradually weakened the local authority on the part of silvopastoral lands. The *Ujamaa* villagization policy of 1970s, further disrupted the traditional management practices. In Babati district, the Haraa forest was gazetted in 1970 during the *Ujamaa* policy. According to elders and key informants, prior to the 1980s, DFOs had the formal responsibility of managing all the forests within the

district. After 1980s, forest governance became adjusted through the establishment of a combination of both regional and district catchment forest offices. This process involved the replacement of DFOs by CFOs in managing catchment forest reserves. The FGD and key informant interviews revealed that these reserves were intensively exploited by local people for timber and charcoal, and also became sources of additional income for government foresters through illegal logging.

When the negative impacts on forests were recognized, the government with the assistance of international donors (e.g. Swedish International Development Agency-SIDA) initiated the first efforts for community forestry management (CFM). Initially, the CFM was based on the introduction and extension of the scientific norms on silvicultural practices by the government foresters. For instance, the program involved the raising of tree seedlings in government nurseries and which were then distributed to village organisations such as schools for planting. In early 1990s, the relevance of indigenous knowledge of the local people on tree growing was recognized. For instance, tree species such as *Acrocarpus* and lemon were introduced from Arusha through individual contacts (Johansson 1991). The combined tree planting campaigns and own initiatives of raising trees since the *Ujamaa* period had increased the number of trees on agricultural lands in Babati. The combination of communal farm trees and private plantations provided alternative sources of poles, timber, fuel, fruits and income for local population (Johansson 1991).

During the period of bureaucratic and political decentralization, major innovations in PFM took place in Tanzania in 1994. As a result of national and district government concerns about the need to conserve Duru forests, under the influence of the 1953 forest policy promoting forest reservation (Wily 1997), the forests were identified for gazzettement as a district forest reserve in 1990. The Duru forest was surveyed for gazzettement, its boundary cleared and beacons were placed in the period 1991–1993 (Wily 2001; Havnevik 2006). However, as a result of local objections to its gazettment, the forest was placed under CBFM in 1994 (Zahabu 2008; Kistler 2009). Subsequently, the neighbouring Haitemba and other nearby forests were included under these CBFM arrangements. The forest complex is now collectively named Duru-Haitemba and is known as the first forest under CBFM in Tanzania (Wily 2000).

The CBFM regime in Babati evolved as a consequence of a combination of institutional changes. In the first place, the process of administrative decentralisation had strengthened the position of the district forest administration. In the second place, due to the process of democratic decentralisation the wishes and views of villagers were explicitly taken into account and the option of CBFM was identified. Four years after the initiation of the CBFM program, a JFM program in the state-reserved catchment forest started. Within the framework of both CBFM and JFM, village assemblies had elected Village Natural Resources Committees (VNRC) (alternatively termed village forest committee or VEC), and local forest guards to carry out daily management activities. The VNRC, which is among committees of village governments, have now also been formed in other parts of Tanzania (Havnevik 2006; Akida and Blomley 2008).

Due to the evolution in forest management arrangements, currently four types of CFRs can be recognized in Babati, each characterized by its own specific set of norms and principles as well as organization and decision-making characteristics (Table 4).

## Institutional Pathways of Community Forestry Regimes in Babati

Dynamics in institutional arrangements for forest management in Babati resulted in several partly interacting processes of decentralisation of governmental services and change in local institutions. These resulted in the formation of a CFRs complex. The changes were mainly the result of exogenous factors, notably the two processes of decentralisation of government administration:

1. Bureaucratic decentralization of the government's administrative authority over forests from the national level to the district level and deconcentration of management authority over national forests.
2. Democratic decentralization with respect to partial devolution of management authority over local forests from the state or district level to village level.

Endogenous changes in the norms and principles for forest use and management took place. On the one hand, the traditional practices based on local authority and socio-cultural values and beliefs were gradually weakened by the introduction of governmental management arrangements. On the other hand, new forms of locally inspired management have emerged as a result of the gradual incorporation of communities in the external administrative and commercial networks. Hence, as a consequence, both novel arrangements for private tree cultivation and agroforestry systems have emerged.

**Table 4** Main characteristics of CFR complex in Babati

| Community FMR | Main principles and norms | Organization and decision-making |
|---|---|---|
| Indigenous forest management | Combination of communal ownership of forest lands with controlled use and conservation based on traditional beliefs and authority | Traditional community institutions as basis for managing forests |
| | At present mainly conservation of small forest patches of cultural significance | |
| Farm tree growing | Privately owned lands used for tree cultivation and agroforestry practices | Individual farmers decision, training from district foresters |
| CBFM | Reserved village forests under district by-laws with local village authority for managing forests in response to local needs for forest products and services | Management through village government and related village natural resource committees. The district government facilitates management of village forest reserves through DFOs |
| JFM | State reserved forests in catchment areas under co-management between authority of state forest service and village committees | DCFO and village community through village government and village natural resource committee authorized to collaborate in managing forests |

The general evolutionary trends in the basic institutional norms and regulations in CFRs in Babati are illustrated in Fig. 2. Originally, two main forest regimes were present, namely, the traditional indigenous forest management regime (TFM), and the externally induced state forest management regime (STFM). These two regimes were not related. The STFM regime was based on the principles of state authority and responsibility as well as professional norms for managing forests. In contrast, the TFM was based on socially-embedded norms and local responsibility. These two co-existing, but non-interacting regimes have gradually been replaced by several distinct, but interacting CFRs such as the CBFM regime, the JFM regime and the private farm tree management (PTM) regime. These regimes reflect varying degrees of balancing socially-embedded and bureaucratic norms and local versus state responsibility (Chhetri et al. 2012). However, bureaucratic norms have gradually overtaken the socially embedded norms in managing forest resources. In Babati, social change as refected in modernization including advance of new religions of Christianity and Islam, and increased literacy levels contributed to the abandoning of the traditional beliefs that were connected to the conservation of sacred trees, traditional elders' forests and Qaidasu and Qaimanda ceremonial forests.

## Discussion

This section further reflects on the evolution of CFRs in Babati district, and the impact of multi-facetted nature of decentralization on CF.

Evolutionary Trends in Norms and Principles for Community Forestry

As Fig. 2 illustrates, the development of the present complex FMRs in Babati involved both endogenous and bureaucratic changes with respect to the basic norms and principles for managing the local forests. The initial development of the TFM and adaptation was instigated through socially-embedded organizations and norms and principles. Although these traditional customary norms are partly sustained, their importance has decreased. Advance of new religion and increased formal education, has contributed to abandoning socially embedded norms connected to conservation of traditional forests. For instance, the role of village elders and religious leaders became restricted to small patches of cultural heritage sites, but the responsibility for managing CF for local livelihood needs was taken over by modern village organisations. This illustrates how bureaucratic processes played an increasingly important role in shaping the norms and principles for CF (Agrawal and Ribot 1999; Simonsson 2004).

The changes in norms related to NRM have also been observed in other parts of Eastern Africa. German et al. (2006) showed how NRM is related to several perceived institutional trends in the highlands. For example, they found that trends in norms and regulations may be related to more general processes of social change such as religion and education. Further, and consistent with Babati, they observed that the role of customary institutions has decreased, while the importance of government regulations has increased. However, in contrast to the observation in the
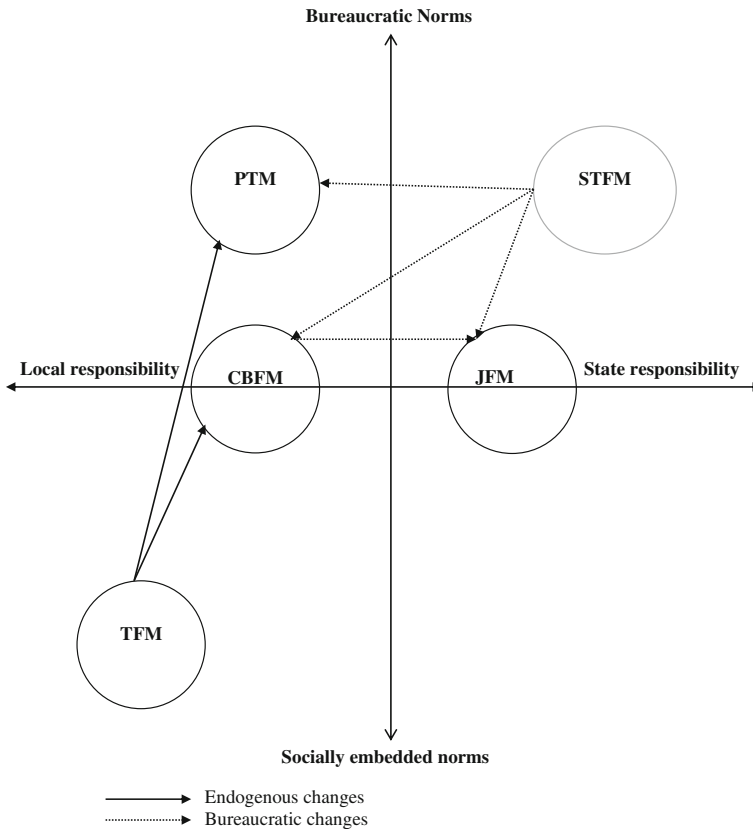
Fig. 2 Evolution of the forest management regime complex in Babati

highlands where importance of by-laws decreased, in Babati the importance of by-laws in setting norms for CF was strengthened (Wily 2000; Blomley and Ramadhani 2006) following the process of political and bureaucratic decentralisation.

Decentralization as a Multi-Facetted Process

The emergence of a CFR complex in Babati involved political and bureaucratic decentralisation, privatization, delegation and multiple trajectories. The bureaucratic and political decentralization were manifested in two ways, namely decentralization in forest services within the MNRT, and decentralization in government administration. The first process concerns a bureaucratic deconcentration in which the management of forest resources was transferred from higher to lower levels within the ministerial administration. This occurred in early 1980s when regional and district catchment forest offices were created and entrusted with the management of catchment forest reserves. This process withdrew the management of catchment forest from DFOs under Babati District Council back to central government forest service. This illustrates that the process of

decentralisation and recentralization may alternate and that bureaucratic decentralisation and democratic decentralisation need to be distinguished (Ribot et al. 2006).

While the process of decentralisation in the MNRT concerned bureaucratic decentralisation, decentralization in government administration constituted political decentralisation. The process involved two major changes impacting on forest management (FM). First, it involved a process of administrative deconcentration in which government administration was shifted from national to regional and district levels (Semboja and Therkildsen 1994). Second, the decentralization of government administration also involved ceding power to district government and village government. At district level, the decentralization gave district councils the authority to establish their own district forest reserves or LAFR. Within village government, the VEC acquired responsibilities of managing village forests on behalf of village community.

Apart from the government administrative deconcentration, the process of privatization has also shaped FM in Tanzania (Ylhäisi 2003; Sunseri 2005). In addition to the management of formal forest reserves on lands under state, district or village authority, tree growing on private lands has also developed. This development arises from both endogenous developments and gradual adaptations of traditional practices. It is also the result of the introduction by forestry development organisations of new silvicultural practices for establishing farm and woodlots. Although this form of FM provides poles, timber and income for communities, it usually constitutes small sizes of forests (Akida and Blomley 2008).

A final process in Babati concerned delegation. This process concerned a partial delegation of forestry development activities to international development organisations and local non-governmental organisations. This illustrates how governments in Africa, due to inadequate financial and human resources, often commission NGOs to support the development of CF (e.g. Donoghue et al. 2003; Sunseri 2005; Zahabu 2008; Lescuyer 2012).

The process of decentralisation in Babati district was not only multi-dimensional, but also involved multi-trajectories in the political administration and the forestry administration. Moreover, it involved the searching for a balance in power over the various stakeholders groups. This search for a proper balance in managing distinct categories of forests included a partial recentralization of forest management authority as a result of the recapture of management of catchment forest reserves which were initially under District Council Forest Officers. But subsequently, a JFM regime has emerged for these state-controlled forests. These developments illustrate that the process of decentralisation in FM should not be conceived of as a linear process, but rather as a multi-trajectory process in which processes of both decentralisation and recentralisation may alternate (Agrawal and Ribot 1999; Ribot et al. 2006). Community forestry should not be conceived of as a local autonomous activity, but rather as a local activity embedded in an external institutional setting. The external institutions do not only concern the political issues such as who has the power to make what decisions, but also normative issues such as what norms and principles should guide local forest management. Although the role and relevance of indigenous knowledge and practices in CF is recognized, there can be observed an

increased dominance of scientific norms and principles in CFRs. For instance, the recently introduced REDD (Reduced Emission from Deforestation and Degradation) initiatives in Babati (Zahabu 2008) are heavily guided by scientific principles and norms which prioritize protection of forests for carbon sequestration over their use by local people. Such increased dominance of global norms and professional knowledge can easily result in a reversal of the processes of decentralisation (Barr et al. 2006).

## Conclusion

From this study, two main conclusions can be drawn. The development of community forestry in Babati district is related to an interrelated process of administrative decentralisation and democratic decentralisation involving elements of bureaucratic deconcentration, devolution, delegation and privatization. It is characterized by a dual process of decentralization of the forest service and of government administration. The decentralization of the forest service mainly involved a deconcentration process, whereas the decentralization of government administration involved both bureaucratic deconcentration and political decentralization. The decentralization of the forest service resulted in the creation of catchment forest offices with authority to manage catchment forests. The decentralization of government administration gave power to district authorities to oversee the management of district forests. This political decentralization has increased the role of district authorities in forest management through the creation of local authority forests, approval of by-laws for village forests, and facilitation of the management of these forests by DFOs. The study showed that the process of devolution has given village community the authority of controlling and managing village forest reserve.

The process of decentralisation in Babati district was multi-dimensional, and involved multi-trajectories of change in the political administration and the forestry administration. In conjunction with the indigenous knowledge and practices, the multiple institutional changes have resulted in the emergence of an interactive CFR complex consisting of CBFM, JFM and PTM. This complex has emerged from two original forestry regimes of TFM and STFM. These were non-interacting and guided by a contrasting set of principles and norms. While TFM was based on local control and socially-embedded institutions and organizations, the STFM was based on government control, scientific principles, and bureaucratic organizations. The present complex of CFRs is characterized by a mixture of bureaucratic and socially-embedded norms. The government administration plays an increasingly important role in shaping the norms and principles for CF, but least in the case of private tree management. The increasing dominance of government in FM calls for policy consideration of sustaining local management practices.

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